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REMARKS

Claims 1-6, 9-21 and 23-25 are currently pending in the subject application and are presently under consideration. This filing is pursuant to an interview with the Examiner on June 30, 2004 wherein applicants' representative demonstrated that the claimed subject invention is substantially different and nonobvious over Mori *et al.* The Examiner stated that the arguments are reasonable and, as recommended, are presented herein in written form. Based on the Interview with the Examiner, it is believed that such arguments place the claimed invention in position for allowance. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claims 1-25 Under 35 U.S.C. §103(a)

Claims 1-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Mori *et al.* (U.S. Patent No. 6,611,728). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Mori *et al.* does not teach or suggest applicants' invention as recited in the subject claims.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Independent claim 1 (and similarly independent claims 12, 17 and 23) recites regulating reticle temperature through a *plurality* of sensors that proximally sense reticle temperature and *proactively controlling* an exposing source based on the temperature information. Mori *et al.* does not teach or suggest such claimed features of the subject invention.

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In particular, Mori *et al.* does not teach or suggest a system that *proactively* controls an exposing source of energy based on temperature information. Rather, Mori *et al.* discloses setting a "... predetermined temperature ..." threshold for controlling the exposure source wherein the system *reacts* when the "...temperature is determined within the predetermined range ..." (e.g., col. 3, line 56; col. 4, lines 15-16; col. 5, line 11; col. 5, lines 15-16; col. 5, lines 24-25) (emphasis added). Thus, Mori *et al.* is *reactive*, not *proactive* since Mori *et al.* only responds when a predetermined set point is reached.

In contrast, the claimed invention recites *proactive* control. A system that employs *proactive* control can take measures to prevent a predetermined threshold from ever being reached. For example, to ensure the threshold is not met, a *proactive* system can look at various factors such as rate of change, current environmental conditions, and overall response of the system. In this manner, the system can *proactively* control temperature to ensure the threshold is never reached. Thus, the present invention can correlate temperature information (e.g., temperatures sensed; past, present and in different zones) to *proactively* control the exposure source (see page 13, lines 1-10).

Moreover, Mori *et al.* does not teach or suggest employing a *plurality* of sensors to measure temperature, as recited in the subject claims. In the Office Action dated November 12, 2003, the Examiner concedes that "Mori discloses a *single* sensor to provide the temperature of a semiconductor substrate," but then asserts that employing a plurality of sensors is an obvious modification of Mori *et al.* that involves "mere duplication of the essential working parts of a device." Applicants' representative respectfully disagrees. The Examiner is reminded of the standard for a §103 rejection, which requires "some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings." *In re Vaeck* at 1438. Thus, although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992). Thus, just because a reference can be duplicated is not enough.

The Examiner relies on *St. Regis Paper v. Bemis Co.*, 193 USPQ 8 to contend that Mori *et al.* can be modified to teach the subject invention. However, *Bemis* is

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substantially different than the claimed invention. *Bemis* relates to mere duplication of paper bags wherein duplicate bags are inserted in each other to create a paper bag with more layers. Thus, all the essential working parts (bags) are duplicated. However, mere duplication of the temperature sensor of *Mori et al.* would not result in the applicants' claimed invention. Thus, this reasoning is improper.

Employing a plurality of sensors as cited in the subject claims is a nonobvious modification of *Mori et al.* to one skilled in the art because such changes do not constitute a mere duplication of essential working parts of *Mori et al.* Rather, modifying *Mori et al.* to utilize a plurality of sensors requires wholesale changes not contemplated in *Mori et al.* For example, employing a plurality of sensors requires additional processing, power, memory, algorithms, software, hardware, applications and the like to process the myriad computations associated with such data. Thus, such modification is not obvious to one of ordinary skill in the art.

Furthermore, there is no suggestion or motivation found in *Mori et al.* to make such a modification. For instance, *Mori et al.* does not mention any advantages of utilizing a plurality of sensors over a single sensor. As noted in the subject application, a plurality of sensors can be assigned to particular zones to provide temperature signals indicative of the sensed temperature characteristics. In this manner, a control system can be programmed and/or configured to generate a topographic map of the reticle, wherein the surface area is divided into a plurality of zones or regions. (page 9, lines 3-7). Such multiple sensors, zones and topographic map to provide a granular and precise measurement profile of the reticle temperature is not contemplated or even mentioned in *Mori et al.* Thus, there is no motivation to modify *Mori et al.* to employ a plurality of sensors, as recited in the subject claims.

It appears that 20/20 hindsight is being impermissibly employed with applicants' specification as a roadmap to make the purported combination; the rationale proffered to modify *Mori et al.* is to achieve benefits identified in applicants' specification, which overcome problems associated with conventional systems and/or methods. Applicants' representative respectfully submits that this is an unacceptable and improper basis for a rejection under 35 U.S.C. §103. In essence, this rejection is based on an assertion that it would have been obvious to do something not suggested in the art because so doing

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would provide advantages stated in applicants' specification. This sort of rationale has been condemned by the Court of Appeals for the Federal Circuit. *See, for example, Panduit Corp. v. Dennison Manufacturing Co.*, 1 USPQ2d 1593 (Fed. Cir. 1987).

In view of at least the aforementioned reasons, Mori *et al.* does not teach, suggest or make obvious the present invention as recited in independent claims 1, 12, 17 and 23 (and claims 2-6, 9-11, 13-16, 18-21 and 24-25 which depend there from). Therefore, reversal of this rejection is respectfully requested.

II. Conclusion

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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